## **Arizona Mathematics Standard Performance Level Descriptors Grade 5**

<u>Exceeds the Standard</u> – Students who score in this level illustrate a superior academic performance as evidenced by achievement that is substantially beyond the goal for all students. Students who perform at this level demonstrate a wealth of knowledge, skills, and abilities in fulfillment of the math standard. They can divide decimals, simplify fractions, add and subtract proper fractions, mixed numbers and decimals, identify attributes of circles, and distinguish between congruent and similar figures.

<u>Meets the Standard</u> – Students who score in this level demonstrate a solid academic performance on subject matter as reflected by the math standard. Students who perform at this level are able to solve multi-step word problems, evaluate simple algebraic expressions with one variable, and determine equivalency among fractions, decimals, and percents in contextual situations. They can recognize congruent angles, classify triangles, and apply formulas to find area and perimeter.

<u>Approaches the Standard</u> – Students who score in this level show partial understanding of the knowledge and application of the skills that are fundamental for proficient work. Students who perform at this level show some understanding of the math standard's concepts and procedures by identifying factors of positive whole numbers, solving one-step equations with one variable, extending and completing patterns, identify regular polygons, and locate points on coordinate grids. Some gaps in knowledge and skills are evident and may require additional instruction and remediation in order to achieve a satisfactory level of understanding.

<u>Falls Far Below the Standard</u> – Students who score in this level may have significant gaps and limited knowledge and skills that are necessary to satisfactorily meet the state's math standard. Students will usually require a considerable amount of additional instruction and remediation in order to achieve a satisfactory level of understanding.

know the skills required at the "Meets" and know the skills required at the "Approaches" level and	generally know and are able to:
"Approaches" levels and are able to: are able to:	
<ul> <li>Divide decimals.</li> <li>Use the order operations to solve equations.</li> <li>Apply the distributive property.</li> <li>Add and subtract proper fractions, mixed numbers and decimals.</li> <li>Simplify fractions into lowest terms.</li> <li>Classify whole numbers as prime or composite.</li> <li>Find all possible combinations of sets of items.</li> <li>Determine the least number of different colors to be used on complex maps (vertex-edge graphs).</li> <li>Determine measures of central tendency of data sets.</li> <li>Describe the effect of a change in a variable.</li> <li>Identify attributes of circles.</li> <li>Distinguish between congruent and similar figures.</li> <li>Solve multi-step word problems.</li> <li>Determine equivalency among fractions, decimals, and percents in contextual situations.</li> <li>Use rounding to solve problems.</li> <li>Evaluate simple algebraic expressions with one variable.</li> <li>Identify equations that represent the solutions to word problems.</li> <li>Apply formulas to find area and perimeter.</li> <li>Recognize congruent angles.</li> <li>Classify triangles.</li> </ul>	<ul> <li>Compare and order whole numbers, fractions, and decimals.</li> <li>Select number sentences to solve word problems.</li> <li>Estimate area and perimeter of simple geometric figures on grids.</li> <li>Identify factors of positive whole numbers.</li> <li>Predict and verify the likelihood of results of a probability experiment.</li> <li>Express the results of probability experiments as fractions.</li> <li>Solve one-step equations with one variable.</li> <li>Extend and complete patterns.</li> <li>Determine the rules for creating geometric patterns.</li> <li>Find the area and perimeter of polygons on a grid.</li> <li>Identify transformations of geometric shapes on a grid.</li> <li>Identify regular polygons.</li> <li>Locate points on coordinate grids.</li> <li>Determine the appropriate "If then" statement to solve word problems.</li> </ul>

These descriptors do not include all the skills and knowledge as contained in the Math Standard.